

Examination Anxiety among Male and Female School Students: A Comparative Study

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Abstract

Background: A Comparative study was conducted to assess the level of Examination anxiety (Test anxiety) among male and female senior secondary school students in selected schools, Kollam, Kerala. The objectives of the study were to assess the level of Examination anxiety among male and female senior secondary students and to compare the level of Examination anxiety among male and female senior secondary students. The final objective was to find out the association between level of Examination anxiety and selected demographic variables.

Materials and Methods: The present study adopted a Descriptive-Comparative design. 120 senior secondary students (60 Male and 60 Female) from 11th and 12th Standard were enrolled using Non-probability, Convenience sampling technique. The conceptual framework of the study was based on the Transactional model of Test anxiety (Zeidner, 1998). Tools used for data collection were Demographic Performa and Modified Westside test anxiety scale.

Results: Findings of the study revealed that the mean Examination anxiety score among male students was 2.53 ± 0.69 and among female students was 3.16 ± 0.67 . The 'student t value' computed at 5.11^{**} , $df = 118$ by comparison of the mean examination anxiety scores of male and female senior secondary students was statistically significant at $P < 0.01$ level. No association was observed between the level of Examination anxiety and selected demographic variables ($p > 0.05$). **Conclusion:** The findings of the study confirmed that the level of Examination anxiety among the female senior secondary school students were significantly higher than the male senior secondary students.

Key Words: Comparative Study, Examination Anxiety (Test Anxiety), Male, Female, Senior Secondary, School Students.

Introduction

"Exams and grades are temporary but education is permanent".

Father of our nation, M.K. Gandhi once observed that "Education is the all-around drawing

out of the best in child and man-body mind and spirit". Education plays an important role in the life of an individual. In fact, school is the place where the life of a pupil is moulded. The great philosopher, Leo Tolstoy said about the impact of his school as follows: "It was all my life, it was my

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monastery, my church in which I redeemed myself while being saved from all the anxieties, doubts and temptations of life".^[1] A school is an educational institution designed to provide learning spaces and learning environments for the teaching of students under the direction of teachers. Most countries have systems of formal education, which is sometimes compulsory and generally include primary school for young children and secondary school for teenagers who have completed primary education.^{[2][3]} Senior Secondary education usually beginning with Class XI and XII of during which education is differentiated in varying degrees according to the needs, interests, and aptitudes of the pupils. Secondary education is an important stage where students identify their subjects of interest for future learning and get a better understanding of their career path.^[4] The term anxiety is usually defined as a diffuse & very unpleasant feeling of fear or apprehension. Examination anxiety is defined as fear of failure that that you feel before or while talking an important examination that present you from performing in the examination.^[5] Hill and Wig field (1984) suggested that between two and three children in typical class rooms, or approximately 10% of children, are highly test-anxious and experience impairments in test performance as a result. The prevalence of test anxiety among school-aged children may range from as little as 10% to as much as 30%.^[6] Globally, studies have shown that examination anxiety is wide spread in the general population, especially among women. A recent study conducted in United Kingdom has found that between 25-41% of students are experiencing examination anxiety. Study result shows that approximately 15.1% of Secondary school students report moderate to high level of examination anxiety during their study period.^[7] A recent mental health survey conducted by the NCERT throughout India, revealed that examinations and results are one of the most prominent reasons of anxiety among school going students.^[8]

A descriptive study conducted on prevalence of Exam anxiety among adolescence children in rural Kerala revealed that out of 250 children, majority of girls (53.4%) were disproportionately affected compared to (40.1%) boys. These findings also reveal that anxiety disorder in Govt. schools

were relatively less (38.46%) compared to CBSC school students (46.6%).^[5] Considering the high prevalence of Examination anxiety among secondary school children throughout the Indian scenario; The Investigator(s) through this study aims to assess the level of Examination anxiety among male and female senior secondary school students and to compare them.

Objectives of the Study

1. To assess the level of Examination anxiety among male senior secondary students
2. To assess the level of Examination anxiety among female senior secondary students
3. To Compare the level of Examination anxiety between male and female senior secondary students
4. To find out the association between the level of Examination anxiety and selected demographic variables among male and female senior secondary students.

Hypotheses

- H1-There is significant difference in the mean Examination anxiety scores among male and female senior secondary students.
- H2- There is significant association between the level of Examination anxiety with selected demographic variables.

Methodology

Research Approach: Quantitative research approach.

Research Design: Descriptive-Comparative research design.

Population: Male and female senior secondary school students, Kollam.

Settings: Selected higher secondary school, Kollam district, Kerala.

Sample Size: 120 Senior secondary school students(60 Male&60 Female) from selected school, Kollam, Kerala.

Sampling Technique: Non-probability; Convenience sampling technique.

Tools and Technique

Tool-A: Demographic Performa was used to assess the attributes such Age, Religion, Type of family, Education of Father, Education of Mother, Occupation of Father, Occupation of Mother, Family Income per month, Area of residence and Academic performance in previous year.

Tool-B: Modified Westside test anxiety scale was used to assess the level of Examination anxiety among male and female senior secondary school students.

Method of Data collection: Data was collected for a period of one month [10/02/2018 to 10/03/2018] from Government higher secondary school, Kollam. After acquiring formal permission from the concerned authorities, the investigator(s) then obtained informed consent from the samples. Both Demographic Performa and Modified Westside test anxiety scale was used to assess the demographic variables and the level of Examination anxiety among male and female students.

Inclusion criteria: 11th & 12th standard, Senior

secondary students who were willing to participate in the study and available at the time of data collection. Students who can understand English/Malayalam.

Exclusion criteria: Students who were not willing to participate in the study. Students who were unavailable during the period of data collection.

Statistical analysis: Both Descriptive and Inferential statistics were used to analyse the data [using SPSS version 20 (SPSS Inc., Chicago, IL)]. Descriptive statistics such as Frequency distribution and Percentage were used to describe Demographic data and Inferential statistics such as 'Student t test' was used to compare the mean Examination anxiety scores among the male and female senior secondary students. Chi Square was performed to find out the association between level of Examination anxiety and selected demographic variables. The level $P < 0.05$ was ascertained as the minimum accepted level of significance.

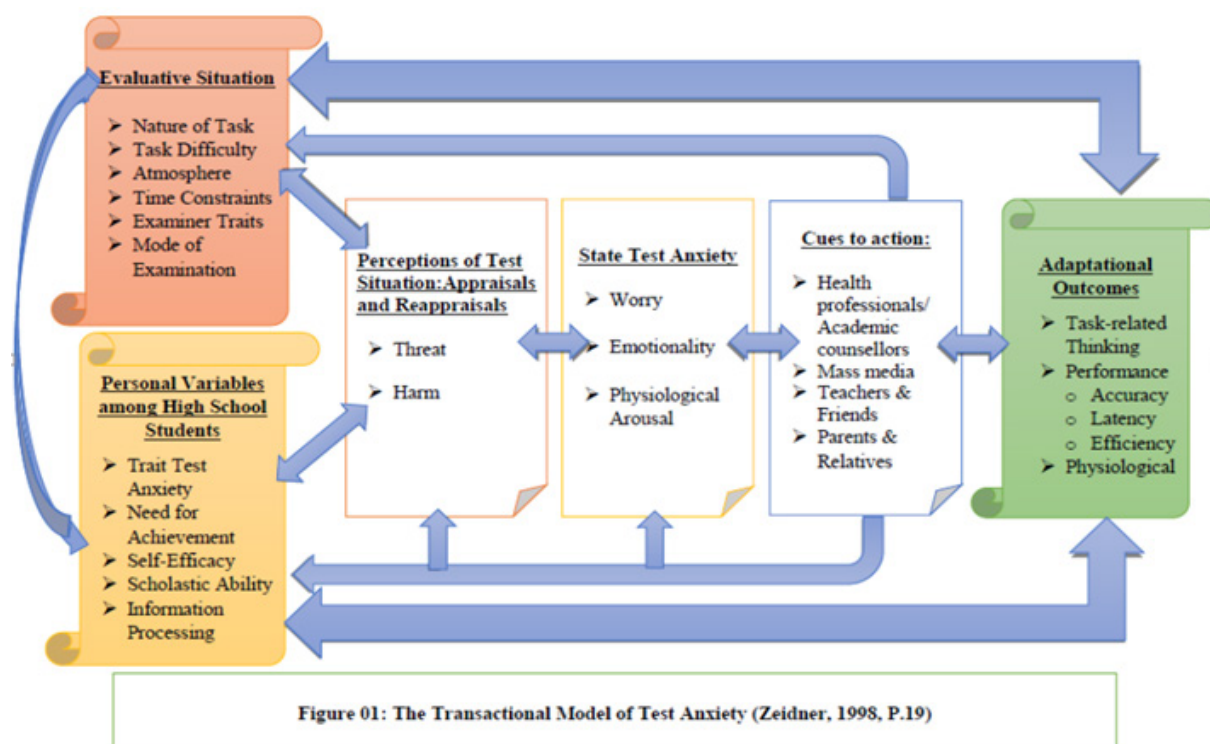


Figure 1: Conceptual Framework based on Transactional Model of Test Anxiety, Zeidner, 1998[Modified].

Results

Section-I: Description of Sample characteristics of Senior Secondary Students.

Table 1: Frequency distribution and Percentage of male and female senior secondary students.

SI No.	Demographic variables	Male (N=60)		Female (N=60)	
		Frequency (f)	Percentage (%)	Frequency (f)	Percentage (%)
01	Age (In years)				
	Up to 17 yrs.	09	15.00%	14	23.33%
	17-18 yrs.	49	81.67%	45	75.00%
	Above 18 yrs.	02	03.33%	01	01.67%
02	Religion				
	Hindu	32	53.33%	36	60.00%
	Muslim	21	35.00%	18	30.00%
	Christian	07	11.67%	06	10.00%
03	Type of family				
	Nuclear	36	60.00%	28	46.67%
	Joint/Extended	24	40.00%	32	53.33%
04	Education of Father				
	Primary	05	08.33%	11	18.33%
	High School	18	30.00%	12	20.00%
	Higher Secondary	25	41.67%	21	35.00%
	Graduates and above	12	20.00%	16	26.67%
05	Education of Mother				
	Primary	06	10.00%	05	08.33%
	High School	28	46.67%	15	25.00%
	Higher Secondary	22	36.67%	28	46.67%
	Graduates and above	04	06.66%	12	20.00%
06	Occupation of Father				
	Employed/Self Employed	58	96.67%	59	98.33%
	Unemployed	02	03.33%	01	01.67%
07	Occupation of Mother				
	Employed / Self Employed	32	53.33%	24	40.00%
	Unemployed/Homemaker	28	46.67%	36	60.00%

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08	Family Income (Per Month)	Frequency (f)	Percentage (%)	Frequency (f)	Percentage (%)
	Up to 10000 Rs.	07	11.66%	05	08.33%
	10001-20000 Rs.	28	46.67%	17	28.33%
	20001-30000 Rs.	12	20.00%	20	31.67%
	More than 30000 Rs.	13	21.67%	18	31.67%
09	Area of Residence	Frequency (f)	Percentage (%)	Frequency (f)	Percentage (%)
	Rural	25	41.67%	28	46.67%
	Urban	35	58.33%	32	53.33%
10	Academic Performance in Previous Year	Frequency (f)	Percentage (%)	Frequency (f)	Percentage (%)
	>80%	09	15.00%	14	23.33%
	60-79	40	66.67%	42	70.00%
	<60%	11	18.33%	04	06.67%

Section-II: Level of Examination Anxiety among Male & Female students

Table 2: Frequency distribution and Percentage of examination anxiety among male senior secondary students. (N=60)

SI No:	Level of Examination Anxiety	Male Students	
		f	%
01	Low Test Anxiety	09	15.00%
02	Normal Test Anxiety control	20	33.33%
03	High Normal Test Anxiety	12	20.00%
04	Moderately High-Test Anxiety	10	16.67%
05	High Test Anxiety	09	15.00%
06	Extremely High-TestAnxiety	00	00.00%

Table-3: Frequency distribution and Percentage of examination anxiety among female senior secondary students. (N=60)

SI No:	Level of Examination Anxiety	Female Students	
		f	%
01	Low Test Anxiety	06	10.00%
02	Normal Test Anxiety control	06	10.00%
03	High Normal Test Anxiety	07	11.66%
04	Moderately High-TestAnxiety	13	21.67%
05	High Test Anxiety	28	46.67%
06	Extremely High-Test Anxiety	00	00.00%

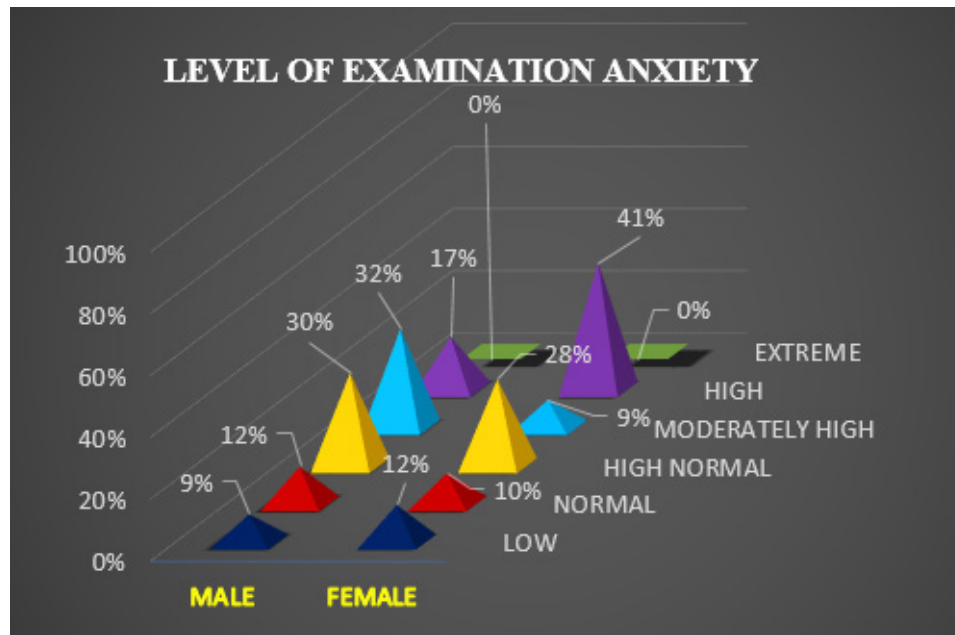


Figure-2: Pyramidal Diagram showing the percentage distribution of examination anxiety among male & female senior secondary students.

Section-III: Comparison of Level of Examination Anxiety among Male and Female Students.

Table 4: Mean, Standard deviation and 't' value of Examination anxiety among male and female senior secondary students. (N=60)

SL. No	Stage/Group	Mean \pm SD	Mean Difference	df	t value	P value
01.	Male Students	2.53 \pm 0.69	0.632	118	5.11**	P<0.01
02.	Female Students	3.16 \pm 0.67				

**Significant at 0.01 level.

Section-IV: Association between Examination Anxiety and selected demographic variables.

The chi square test statistics revealed that there was no significant association observed between level of Examination anxiety and selected demographic variables among both male and female senior secondary students. ($p>0.05$). So, the research hypothesis H_2 was rejected and the null hypothesis was accepted.

Discussion

The study findings revealed that the female students had significant higher Examination anxiety [3.16 \pm 0.67] compared to male students [2.53 \pm 0.69] (t test value 5.11**, df=118, P<0.01) The findings are in partial agreement with a similar Comparative study conducted by Singh. P. Et al. (2015), in Allahabad city, India to assess level of Examination anxiety among children of working and nonworking women studying in secondary school. The study was conducted

among 120 boys and 80 girls and revealed that girls [36.35 \pm 9.93] had slightly more anxiety (not significant) and poor academic performance compared to boys [34.23 \pm 11.12], t value=1.49, P>0.05.^[9] The present study findings are in contradiction with a study conducted by Mary. RA. et. al. (2014) to analyse the level of state anxiety among 50 boys and 50 girls from 10th and 12th grades school students in Tamil Nadu, India, using Westside Test Anxiety Scale.

The board exam going students had increased level of anxiety, particularly higher among boys and 12th standard board exam students.^[10] The findings are in agreement with a study conducted by Siddiqui and Rehman (2016) on Academic anxiety among Reserved & Non-Reserved category of Senior secondary students of Jammu division and revealed that in terms of academic anxiety mean score differences among all comparative groups under study, only reserved females were suffering more from academic anxiety than reserved categories male samples.^[11]

Conclusion

The study was conducted to compare the level of Examination anxiety between male and female senior secondary school students. The results confirm that the mean Examination anxiety score among female students is significantly higher than the mean Examination anxiety score among male students at $p < 0.01$ level. Therefore, it is concluded that the female senior secondary students have more Examination anxiety compared to male students.

Limitations

The present study was limited to 120 samples (60 male and 60 female students).

The study used a non-probability, Convenience sampling. Generalization of the study findings remains limited.

Recommendations

The study can be conducted on a large sample with random sampling to generalize the findings. An interventional study can be conducted to reduce the examination anxiety among students. A similar study can be replicated among other school and college students.

Ethical Considerations

The Ethical clearance to conduct the study was obtained from the institutional ethical committee following which the researchers also obtained formal permissions from the concerned authorities. Also, a voluntary written informed consent was obtained from the study participants after explaining the objectives of the study. Confidentiality was ensured throughout the course of the study.

Budget

Self-Funding

Conflicts of Interest

There are no conflicts of interest related to the study, authorship and/or publication of the article.

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